ALLEN COUNTY ENGINEER

2005 - 2006 ANNUAL REPORT

Timothy J. Piper, P.E., P.S.

Allen County Engineer

Issue 7 April 2006

ALLEN COUNTY ENGINEER
1501 North Sugar Street
Lima, Ohio 45801
Phone (419) 228-3196
Fax (419) 227-2920

Inside this issue:

E-mail

tpiper@allencountyohio.com

WEBSITE

http:/ coengr.co.allen.oh.us

BUSY FIRST SIX MONTHS AS COUNTY ENGINEER

It has been a busy time during my first six months as Allen County Engineer. As a thirty-year employee of the Allen County Engineer's Office, I was able to "hit the ground running". My experience in bridge, roadway and drainage projects, and procuring federal and state funds, has served me well. My close relationship with our office staff and field crews has been good over the years and I know our employees and what they are capable of. Let's review my first six months in office.

Employee Relations: When I took office I wanted to establish a close rapport with the men and women who work for me. Consequently, I established an Employee Relations Committee, made up of one worker from each crew, including one from the office staff. The committee meets monthly to discuss varying topics from job safety to health care. We discuss problem areas in the work environment and work out solutions. I think morale has improved in our organization as a result of the Employee Relations Committee.

Eastown Road Project: Last year I was the project manager for the $5.2 million Eastown Road – Phase 1 Project. It is the largest single project cost-wise that our office has ever undertaken. Working with the contractor, the Shelly Company, and the inspector, we were able to keep the project under budget and on schedule. The project, done in phases to facility ingress and egress to businesses and residents, was completed to the point that we could open it to traffic on December 15, 2005. The Shelly Company is again working on the project this spring and it should be completely done by early May of this year. On phases 2 & 3 of Eastown we will utilize in-housed staff to do project management and inspection, which will save the taxpayers of Allen County over $800,000, since we will no longer need to outsource this work.

Acquiring Federal Funds: With phases 2 and 3 of Eastown Road scheduled to begin in 2008 and 2009 respectively, we began to look at the budget to complete these extensive projects. We were still short of funds for both projects. I made a request to the County Engineer's Association of Ohio (CEAO) for additional federal funds, since CEAO administers and disburses those funds. I made a formal presentation to the CEAO Committee and was able to obtain $2.8 million additional federal funds for Eastown Road Phase 2 and 3.

Acquiring State Funds: When Procter and Gamble decided to build a transfer center for their products on Reservoir Road about a mile from their current plant, the county commissioners and I started meeting with Procter and Gamble officials and representatives of the Governor's Economic Development office. We had to determine how to improve Thayer Road, the main route for outbound trucks from the transfer center. Working together, we were able to obtain $2 million in Ohio Department of Development funds, which will pay for 100% of the project. This includes payment for consulting fees, road right-of-way purchases and the reconstruction of the roadway. No local funds will be used for this project from my budget or the commissioner's budget. Our office will oversee the project and perform inspection of the work for county standards.

Salt Brine Application For De-Icing: This winter, I initiated a program to apply salt-brine on dry pavement, before snowstorms, so that melting of snow begins immediately. At a small cost, our mechanics outfitted an existing water wagon truck with a sprayer bar and we were able to apply salt brine on about 80 miles of major roadways for a cost of only $6 per mile.

Utilized In-House Staff: We utilized in-house staff to digitally design a new 2006 Allen County Road Map. We will also utilized in-house staff to update our website to make it more informative by giving road reports during snowstorms and including permits and standards that can be downloaded by the general public.

Targeted Safety Improvements of Intersections: Working with the Allen County Regional Planning Commission, we have identified high-accident intersections that need safety improvement. This month we will be installing new high intensity stop signs, stop-ahead signs and post strips on three intersections that have had many accidents. These signs are highly reflective at nighttime, which warns drivers of the upcoming intersections from a greater distance. Installation is underway to install these signs at the intersections of Bluelick and Slabtown Roads, Bluelick and Stewart Roads and Elm and Copus Roads. We will be looking at other improvements in the future to reduce accidents and to make our roads safer for our citizens.

Tim

2005 COUNTY ROADS

The Allen County Engineer's Office requires a permit for all work done within the county's road right-of-way. Permits are required for installation of a driveway; utility work consisting of road cuts, bore pits and trenching within the right-of-way; tapping into roadside drainage tiles; and hauling overweight items.

Permit applications include a nominal fee and a performance bond to ensure proper procedures are followed. The performance bond is returned after work is approved. Fees will be assessed for working without a permit. Applications can be obtained at the Allen County Engineer's Office. Application will require approximately 5 minutes to fill out and will be valid for 90 days. Permit applications must be received 2 days prior to construction. Refer to page 4 for Stormwater permit information.

SPRING IS HERE !!

Spring has sprung and winter is now behind us. The County Engineer's budget managed the snow and ice control pretty well, using 2000 tons of salt, 2900 tons of ice grits and about 2100 hours of overtime totaling $236,000. The salt brine application really helped to keep material usage and cost down this year.

Looking back on 2005

In 2005, over $1.1 million dollars was spent for county, township & village road work. Our county road crews and our paving contractor were very busy paving 34.69 miles of county, township and village roads and sealing 59.3 miles of roads; sealing is another name for tar & chip application to the surface of the roadway. Seal acts as a water sealant to keep pavement from absorbing water. Seal does little to improve the strength of the pavement.

The traffic department striped 285 miles of roads, 146 miles being county roads, 117 miles were township roads and 22 miles were municipalities, edge line and intersection painting was also done in 2005, along with painting of the railroad crossing warnings and school lettering on roadway locations. Thermoplastic in 42 locations is also maintained by the traffic department. There are over 11,000 traffic signs, 14 traffic signals and 3 flashing signals throughout Allen County that our traffic department maintains.

ROAD IMPROVEMENTS

In 2005, the Allen County Engineer received Ohio Department of Development (ODOD) Funds for two projects involved with economic development. One project was the intersection improvement at Sugar Street and Bible Road. This project was necessary due to increased truck traffic that will be generated by the new engine line at the Lima Ford Engine Plant. The turning radii were widened, new traffic lights and poles were erected, the entire intersection was paved and thermoplastic pavement markings were installed. This project was designed by the Allen County Engineer's Office and Bluffton Paving Inc. was the contractor. The total cost of the project was $116,054.50 with ODOD providing $100,000 and the Allen County Engineer paying the remaining $16,054.50.

The other project to receive ODOD Funds was the intersection improvement at Reservoir and Mumaugh Roads.

This project was needed to accommodate the extra truck traffic due to the expansion of the Procter & Gamble Plant. The pavement was widened on both roads, new traffic lights and poles were erected, drainage was improved, the entire intersection was paved and thermoplastic pavement markings were installed. This project was designed by CESO, hired by Procter & Gamble, and the contractor was Bluffton Paving, Inc. The total cost of the project was $177,551.88 and ODOD paid for the entire amount.

Saying Goodbye

The engineer's office was sad to see 2 special employees retire after a long time of service. Judy Linder (pictured right) retired on December 31, 2005 with 30 years of service in the Tax Map Office located in the county's courthouse.

Judy was an asset to Allen County with her professionalism and enthusiasm of resourcefulness in helping her fellow workers and the general public. Harold (Butch) Van Meter retired on January 31, 2006 from the Engineer's Office with 43 years of service to Allen County. Butch started at the Engineers Office working on the road crew as an Equipment Operator on January 16, 1963. He participated in numerous miles of roadway paving, sealing and widening projects and snow removal for the county and townships.

Tim Piper presented Butch with a plaque for his 43 years of service to Allen County. The County Commissioners awarded Butch with a Resolution of Appreciation for his outstanding professional achievements, exceptional service and dedication to the office of the Allen County Engineer and the Citizenry of Allen County. Happy retirement!!

FUTURE ROAD PROJECTS

EASTOWN ROAD PHASE TWO— Construction from State Route 81 to State Route 309. Scheduled for 2008

EASTOWN ROAD PHASE THREE — Purchasing of right-of-way, from Elm Street to State Route 117. Scheduled for 2009

THAYER ROAD — Road widening and improvement - Plan preparation and right-of-way acquisition from State Route 81 to Reservoir Road. Scheduled for 2006

2005 BRIDGE PROJECTS

The Allen County Engineer is responsible for the inspection, maintenance and replacement of over 380 bridges on the county system. To manage this system, Tim Piper relies on the bridge department to maintain each bridge for as long as possible. While the average bridge is expected to last fifty years, actual life expectance can vary anywhere from 25 to 100+ years. This combined with funding issues, makes our bridge replacement program somewhat cyclical in nature. After several big years, 2005 turned out to be a little subdued, in fact we only had one (1) major bridge project for the year. While this may not sound very productive, in actuality it was a great benefit to the county. Since replacement projects receive the most attention, general maintenance projects can be easily overlooked. This lull in replacement projects allowed us to refocus and concentrate our efforts on maintenance issues for 2005 and 2006.

Bice Road Bridge

Our major bridge project in 2005 was the famous Bice Road Bridge No. AMA-121-0.74, which is located between Conant and Sunderland Road in Amanda Township. This project replaced the original steel truss bridge, which was closed in 1998, with a three (3) span prestressed concrete box beam bridge. In addition to replacing the structure, we also realigned the roadway to provide safer traffic flow. All of this work was performed by Eagle Bridge Company out of Sidney, Ohio. They began the job on April 12th, set the box beams on

Bice Road Bridge

June 7th and completed the project on August 18, 2005. All totaled, this bridge and roadway project cost $647,130.71 and was funded using both local and federal funds. These costs can be detailed as follows:

Engineering Fees (local funds)	$ 51,562.57
Right-of-Way Acquisition Fees (100% Federal)	$ 14,701.00
Inspection Fees (100% Federal)	$ 16,337.90
Construction Costs (100% Federal)	$ 564,529.24
Total Costs	$ 647,130.71

Next year's major bridge project is the rehabilitation of the Metcalf Street Truss Bridge No. ALL-CR 270-4.13, over the Norfolk Southern Railroad, located in the City of Lima, Ohio. This rehabilitation includes but is not limited to the following work; preparing, priming and painting of the existing structural steel, guardrail replacement and sealing of concrete surfaces of the large steel truss bridge. In an effort to save money, the Allen County Engineer, Tim Piper, has decided to administer the construction of this project in-house, which was initially managed by the Ohio Department of Transportation. The project has been estimated to cost **$2,698,291,** with an additional 13% expected for inspection costs. In order to afford this project, the Allen County Engineer will be utilizing federal funds to cover 95% of the construction cost, with the remaining 5% to be shared with the City of Lima. In addition, Tim Piper plans to save about **$108,000.00** by utilizing in-house

Metcalf Street Bridge

staff to administer the project and by hiring out the inspection. This project should begin this summer and be completed by September 1, 2006.

ALLEN COUNTY BRIDGE FACTS

4	Bridges Closed
10	Bridges with load limits
380	Bridges Inspected
134	Prestress Box Beam Bridges
44	Steel Beam Bridges
40	Concrete Deck Bridges
27	Truss Bridges

2005/ 2006 Drainage Engineering Department

All engineering and administrative work conducted by the Drainage Engineering Department is supervised and approved by Timothy J. Piper, the Allen County Engineer. This department has a dual role within the county structure. It operates as the reviewing agency for commercial, industrial, and residential developments, as well as the drainage consultant for the County Commissioners. Within this realm we are responsible for all petitioned drainage improvements of which the Commissioners have final authority. We are also the County Engineer's compliance coordinators of the OEPA's Phase II Stormwater Regulations. An integral component of this program of which our department manages is the Stormwater Management & Sediment Control Regulations. The Stormwater Regulations are a self-supporting entity funded entirely from permit and review fees acquired from developers.

Douglass S. Degen, Drainage Engineer is the Supervisor of the Drainage Engineering Department as well as Superintendent of the Ditch Maintenance Department and as such is responsible for reviewing all of the work, budget, and assessment procedures, conducted by the engineering and ditch maintenance departments. This includes annual review of fund balances to determine which projects need assessing for future maintenance activity. Bill Kimmel supervises all documentation and work completed within the Ditch Maintenance Department. Brandon Brenneman is also an integral component of our Ditch Maintenance Department. In Bill's absence Brandon becomes the supervisor and addresses all maintenance needs in an excellent and professional manner. Currently we maintain 170 miles of Open Ditch, 20 miles of Agricultural and Residential Conduits, 11 miles of Waterways, and 6 Detention Ponds. These result in the management of over $8 million dollars in drainage improvements. Our maintenance program grows by an average of 3 to 6 projects annually.

Economical spot spraying

Funding for the engineering, administration, construction and maintenance of petitioned drainage improvements is derived from funds acquired from parcel owners within the watershed of each project. The funding method and process are outlined in the Ohio Revised Code, Sections 6131, 6133, and 6137, and have been utilized by Allen County since the mid 1800's.

Flow line dip out & debris removal

One of the most important aspects of the petition process is the permanent maintenance program. All projects constructed through petition are placed on permanent maintenance once construction is completed. As stated in last years report, we anticipated FEMA funding to address the log jam and debris problems associated with the 2005 Ice Storm. Unfortunately, we were not allocated funding for projects on permanent maintenance. However, since numerous negatively impacted projects were on maintenance were able to address problem issues by utilization of maintenance funds.

Highlighted in this report are photographs of selected maintenance activities. I would like to specifically point out that we have an extremely hard working crew of highly skilled personnel who take a great deal of pride in their work and in many cases do not work in the most desirable conditions.

The work elements associated with petitioned drainage improvements as well as all other department functions are numerous and a monumental task. Due to the nature and number of current projects on our roster, it is entirely unfeasible that one individual could accomplish the work elements alone. To assist with these endeavors additional personnel has been hired in the Drainage Engineering Department.

Nathan Davis–Assistant Drainage Engineer

Nathan Davis has been hired as the new Assistant Drainage Engineer. Nathan grew up in Pandora, Ohio. He graduated from The Ohio State University with a Bachelor of Science in Civil Engineering in 2002. He is married to Rachel and she is due with their first child in July. They reside in Bluffton. Nathan has an extensive technical background, as a former employee of the Natural Resource Conservation Service, and has fit very well into our organization. Do not hesitate to contact him with any questions in regard to drainage issues.

Agricultural Conduit Repair

Andrea Rode, formerly Sterling has also returned on a part-time basis to assist with the current projects on our roster. She was the Assistant Drainage Engineer from 2002 through 2004, and was employed part-time for four years while attending Ohio Northern University. She graduated from ONU with a Bachelor of Science Degree in Civil Engineering in 2001.

If you have any questions or problems pertaining to drainage issues, petitioned drainage improvements or their maintenance please contact the Allen County Engineers Office, Drainage Engineering Department. Phone 419.228.3196.

Log Jam & Debris Removal

Residential Conduit Repair

Stormwater Management and Sediment Control Regulations

The Board of County Commissioners adopted the regulations on February 1, 2001, in accordance with Section 307.79 of the Ohio Revised Code. The purpose of the regulations are to establish stormwater management using Best Management Practices (BMP's) and conservation practices to control the pollution of public waters by sediment from accelerated soil erosion and stormwater runoff caused by earth disturbing activities, subsurface drainage and land use changes connected with activities within a development area.

They are intended to:

A. Eliminate or significantly reduce flooding, erosion, and sedimentation damages caused by development;

B. Eliminate or significantly reduce damage to receiving streams, storm sewers, or channels caused by increased runoff or pollutant loading of the water being discharged into them due to development that may be caused by illicit discharges;

C. Develop public education and outreach programs to promote and maintain the health, safety and general well being of the environment and the inhabitants of Allen County. The programs must be targeted at both the general community and commercial, industrial and institutional discharges;

D. Development of construction site stormwater runoff regulations that requires the use of appropriate BMP's. Preconstruction review of Stormwater Management & Sediment Control Plan, site inspections during construction for compliance, and establishes and enforce penalties for noncompliance;

E. Development of post-construction stormwater management regulations that requires the implementation of structural and non-structural BMP's within new development and redevelopment areas, including assurances of the long-term operation of BMP's; and

F. Promote pollution prevention and good housekeeping for municipal operations such as efforts to reduce stormwater pollution from the maintenance of open space, parks and vehicle fleets.

The engineering staff of the Allen County Engineers Drainage Department, supervised by Douglass Degen, Drainage Engineer, manages the entire process for the Board of County Commissioners. The Stormwater and Sediment Control Regulations & Stormwater Design Specifications can be obtained from the Allen County Engineers Office or downloaded from the Lima-Allen County Regional Planning Commission website.